

REMARKS

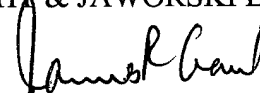
Entry of this amendment is respectfully requested.

If any fees are due to enter this amendment or to maintain pendency of this application,
please charge the fees to Deposit Account No. 50-0624.

Respectfully submitted

FULBRIGHT & JAWORSKI L.L.P.

By


James R. Crawford
Reg. No. 39,155

666 Fifth Avenue
New York, New York 10103
(212) 318-3148

20020221 21 283001

Can Use

10/088712
J Rec'd PCT/PTO 20 MAR 2002

December 14, 2001

EP000958

- 12 -

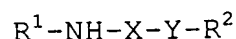
PCT/EP 00/09587

23208P WO/WWASpu

New Claim 1

5

1. A storage-stable sulfonated condensation product based on an amino resin former having at least two amino groups and sulfite and/or naphthalenesulfonic acid and also formaldehyde and, if desired, organic
10 nitrogen bases, characterized in that it comprises at least one nitrogen-containing formulation auxiliary selected from among compounds of the formula (I)



15

where

R^1 and R^2 are each, independently of one another, H, $-CH_3$, $-C_2H_5$, $-C_3H_7$ or together form $-(CH_2)_n-CH_2-$

X = $-CH_2$, CO, CS

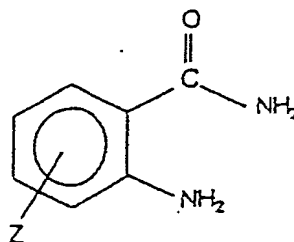
20 Y = S, NH, $-(CH_2)_m-$

n = 0 to 9

m = 1 to 4;

and/or compounds of the formula (II)

25



where

Z = $-OCH_3$, $-SO_3H$, $-SO_3^-M^+$, $-NO_2$, $-NH_2$, $-NH-NH_2$,

30 $-CO_2^-M^+$, $-CHO$, H,

M = a cation

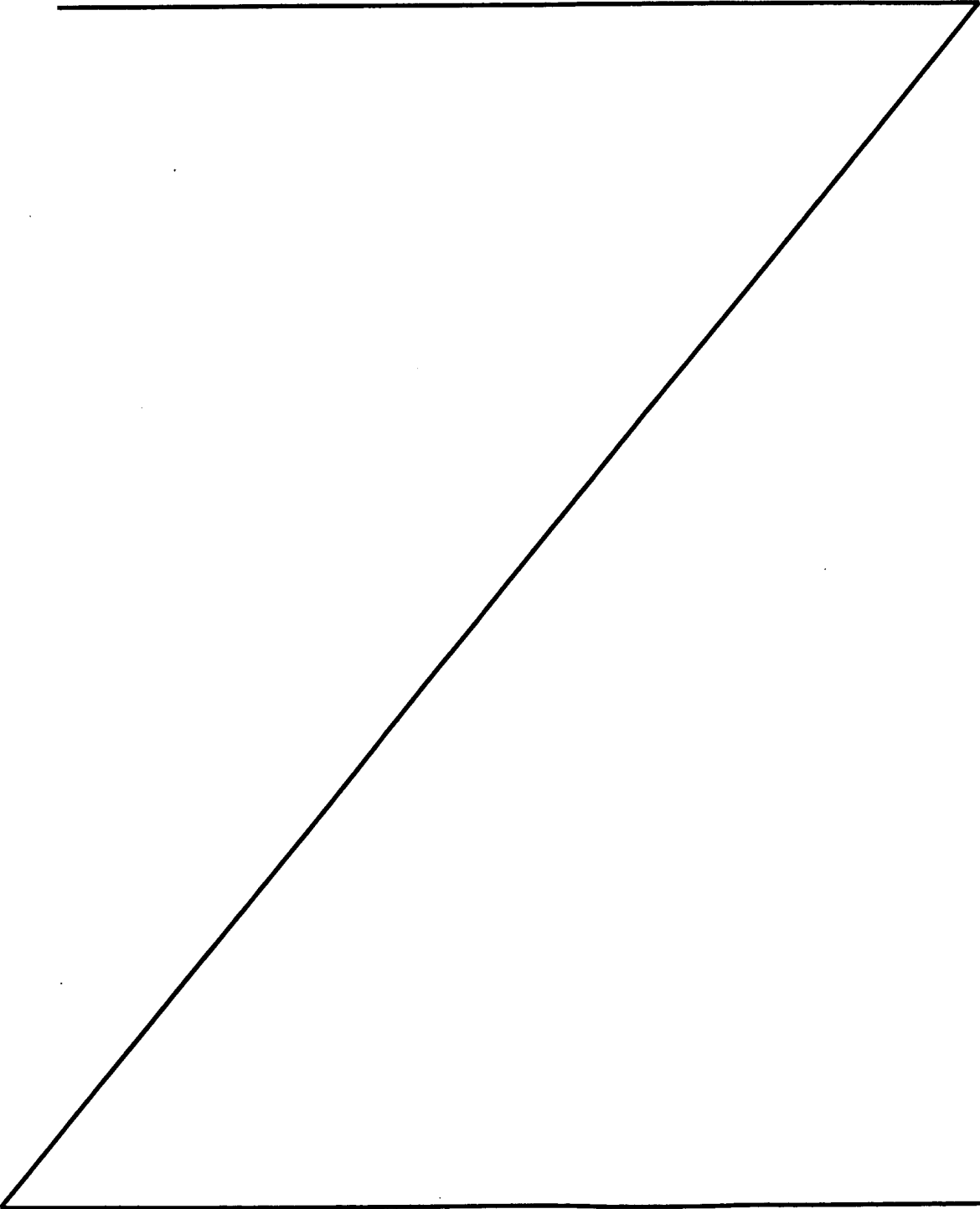
AMENDED SHEET

December 14, 2001

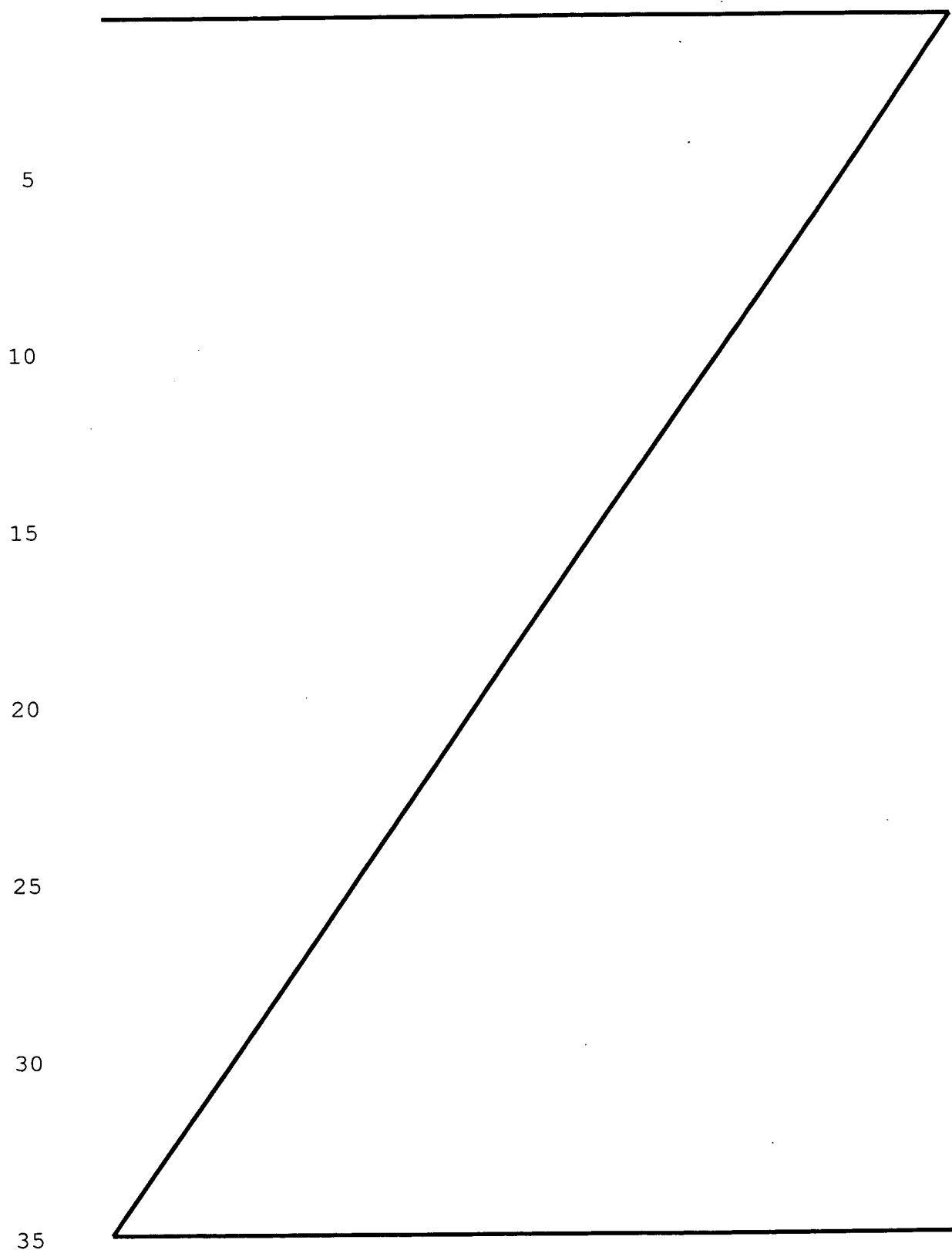
EP000958

- 13 -

and in that the molar ratio of amino resin former :
formaldehyde : sulfite : nitrogen-containing
formulation auxiliary is 1 : 1.9 - 6.0 : 1.0 - 2.0 :
0.01 - 1.5 and/or the molar ratio of naphthalene-
5 sulfonic acid : formaldehyde : nitrogen-containing
formulation auxiliary is 1 : 0.7 - 3.0 : 0.01 - 1.5.



AMENDED SHEET



However, all these condensation products have the disadvantage that the spray drying of aqueous solutions

of conventional fluidizers has an extremely adverse effect on the early strength development which is of particular importance for CaSO_4 applications due to the high thermal stress during drying.

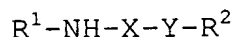
5

It is therefore an object of the present invention to develop storage-stable sulfonated condensation products based on an amino resin former having at least two amino groups and sulfite and/or naphthalenesulfonic acid together with formaldehyde which when used as additives for hydraulically setting additives do not display the abovementioned disadvantage of a thermal change but are instead stable over a wide temperature range.

15

According to the invention, this object is achieved by sulfonated condensation products which further comprise at least one nitrogen-containing formulation auxiliary selected from among compounds of the formula (I)

20



where

R^1 and R^2 are each, independently of one another, H, $-\text{CH}_3$, $-\text{C}_2\text{H}_5$, $-\text{C}_3\text{H}_7$ or together form $-(\text{CH}_2)_n\text{-CH}_2\text{-}$

25

X = $-\text{CH}_2$, CO, CS

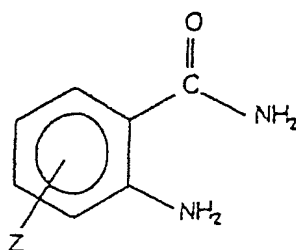
Y = S, NH, $-(\text{CH}_2)_m\text{-}$

n = 0 to 9

m = 1 to 4;

30

and/or compounds of the formula (II)



where

5 Z = -OCH₃, -SO₃H, -SO₃⁻M⁺, -NO₂, -NH₂, -NH-NH₂,
 - CO₂⁻M⁺, -CHO, H,
M = a cation, in particular Na,

and in which the molar ratio of amino resin former :
formaldehyde : sulfite : nitrogen-containing
10 formulation auxiliary is 1 : 1.9 - 6.0 : 1.0 - 2.0 :
0.01 - 1.5 and/or the molar ratio of naphthalene-
sulfonic acid : formaldehyde : nitrogen-containing
formulation auxiliary is 1 : 0.7 - 3.0 : 0.01 - 1.5.

15 Contrary to all expectations, it has been found that
the storage-stable sulfonated condensation products of
the invention display, in addition to the desired
thermal stability, a drastic reduction in the
undesirable outgassing of formaldehyde and/or ammonia
20 which has hitherto been typical for this class of
product. This effect displayed so clearly was not
foreseeable.

As regards the components of the storage-stable
25 sulfonated condensation products, the invention
provides for melamine and/or urea to be used as
preferred amino resin formers. These can be replaced to
an extent of up to 70% by weight by thiourea,
dicyandiamide, a guanidine (salt) and mixtures thereof,
30 although replacement to an extent of from 30 to 50% by
weight is preferred.